



PHYSICAL EDUCATION

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**TOPIC NO. 1
Introduction**

**Lecture - 172
Principles, Characteristics, Aims
and
Tasks of Sports Training**

Introduction

The word '**training**' has been a part of human language since the archaic period and it means '**preparation for some task**'. Our main task here is fitness and conditioning for **sports** and games. Hence, Sports training is a process of sports perfection directed by scientific and pedagogic principles and aims at leading a sportsperson to high and top level performance in a sport or an event by means of planned and systematic improvement of performance capacity and readiness of performance. It is a conscious human activity.

Principles

There are many misconceptions that exist in the minds of most of the people, that optimum performance can be achieved by just playing or taking part in the chosen sport. It is nothing but a myth and researches conducted in the field of Physical Education and Sports have clearly revealed that utmost efficiency, constant improvement and optimal and balanced development of motor abilities can only be reached by participating in round the year conditioning program that are prepared keeping in mind the principles of sports training. Principles are the guiding factors for proper development and effective implementation of a sports training program. These principles serve as directives for the coaches; physical educators and sportspersons and they adhere to these principles so as to have optimal benefit from the time and effort spent in training. Non adherence to the principles may not only lead to the

ineffectiveness of the program but also hamper the growth of the sportsperson's performance.

The following principles of sports training should be adhered to for the effectiveness of the training program for the coach, sportsperson, as well as all the experts working tirelessly to achieve the aim of the training program:

1. **The Principle Of Continuity/Uninterrupted Training:**

Gottfried Leibniz introduced a heuristic principle 'The Law of Continuity'; this principle stated that **"whatever succeeds for the finite, also succeeds for the infinite"**. In order for a sportsperson to achieve his optimum performance, a systematically planned scientific training program that has continuity needs to be implemented. The training plan should be so designed that the trainee can achieve the goal as well as strive to outdo his own best as well. Even in day to day life when we start working on a particular topic, it is very important that we work on it on a daily basis. The continuity in work not only guarantees the achievement of the ultimate goal but also make it easier for the former to achieve it in an efficient and economical manner. In case we start the task and leave it in between then all the initial thought and effort that we have put in is lost and the progress of work is also not certain.

The principle of continuity in terms of the training of a sportsperson states that training should be continuous i.e. it continues from week to week, month to month and from year to year. If the training does not proceed in the above mentioned manner then it becomes interrupted, interrupted training does not guarantee attainment of high performance goals and thus may also lead to a decline in the performance capacity of the sportsperson or trainee. It is of utmost importance that measured and calculated breaks in training are administered so as to ensure proper recovery but long breaks interfere with performance and may also lead to decline of performance capacity of the concerned.

2. **The Principle of Steadily Increasing Load:**

When we perform a task for the first time it requires more effort and tact than the effort that may be required in the consecutive trials, once we get habituated to a particular load then the load becomes ineffective in making us work and hence the degree of difficulty needs to be increased so as to make one work harder. Load refers to any physiological and psychological demands that are placed on an individual through a motor stimulus (movement) which results in the improvement and maintenance of performance capacity. Loads administered are usually of two types, namely the outer load and the inner load. Outer load being divided into quality of movement, physical exercises, the intensity of load (intensity of stimulus and density of stimulus) and volume of load (duration of stimulus and frequency of stimulus) and inner load basically referring to the response of the body to the outer load (consists of symptoms such as sweating, change in colour of skin, visible changes in the quality of movement. etc.).

According to the principle of steadily increasing the load, the training load should be gradually increased in order to improve performance. The performance capacity of a sportsperson gets enhanced as a result of adaptation to the given training

load. In order to keep this process of increase in performance continuous, the training load needs to be increased as soon as the process of adaptation is complete. Repeating the same load for a very long time causes a load to lose its effectiveness.

The pattern of increase in training load however should not be in a linear form but it should rather be increased in step or staircase pattern.

3. The Principle of Individual Load:

We are well aware of the fact that no two individuals in this planet are alike they may differ in one or many aspects from one another and hence the principle of individual load should be considered. Since every individual is different due to individual differences, hence each sportsperson's response to a given exercise will definitely vary. Thus, the training program needs to be formulated keeping certain individualistic characteristics in mind namely biological and chronological age, training age, training state, talent, psychological factors like: intelligence, temperament, social and economic factors, total load taking capacity and pace of recovery. Strict adherence to this principle ensures maximum benefit to a sportsperson.

4. The Interval Principle:

There is a well known saying that 'too much of anything is bad'; this saying goes well in case of the training schedule of a sportsperson. The coach should always keep in mind the duration of training and the required amount of rest that needs to be given to the sportsperson after a training unit. There are specific bouts of load in which the sportsperson need longer recovery time whereas in others the time required for recovery is very minimal. Recovery in between the training loads is also very essential for the improvement in the performance of the sportsperson. This principle emphasizes that for the training load to be effective, every phase of load shall be followed by a measured period of recovery. Maximum adaptation occurs only when there is a proper proportion between the phases of load and recovery. If the phases of load and recovery are longer or shorter than what is actually needed in proportion to load administered then it makes the training load ineffective.

5. The Principle of Active Participation:

The sportspersons today are aware as well as more interested in knowing the benefits of the training units that they undertake. They ask questions to the coach about their training sessions, their performance and their improvement. If he is kept in the dark it may lead to withdrawal from the coach or loss of interest on the part of the sportsperson. This principle ensures that the sportsperson shall also be an active participant of the planning group that has been entrusted with the responsibility of formulation of the training program. It is believed that the sportsperson will be more active, sincere and meticulous in completing training schedules in each training unit when he has himself actively participated in planning.

6. The Principle of Use of Critical Loads:

Training under normal circumstances is not sufficient to prepare the sportsperson for the main event. The demands of the main competition are much higher than that of the training session. In order to prepare the sportsperson to meet the unforeseen higher demands of competition the training process shall include the administration of critical load (loads which are higher than the loads normally administered) 4-5 times in a year. In order to ensure proper recovery, the principle of proper proportion between load and recovery shall also be kept in mind.

7. The Principle of General and Specific Preparation:

In order to build a strong fort it is extremely essential that the base or foundation is strongly laid. Similarly in order to ensure that the sportsperson achieves optimum performance the initial training or preparing the base is very important, all errors major or minor needs to be rectified at the initial or formative years of the sportsperson. Hence, for the improvement of performance, both general and specific preparations are equally significant. General preparation serves as the base for specific preparation. As a matter of fact, the performance will be better if the base is better. General preparation should always precede specific preparation.

8. The Principle Of Clarity:

To enable a sportsperson to have optimal benefit from sports training program, information about technique, tactics and other aspects of performance shall be clearly given. The training programs will lose effectiveness if instructions are vague.

9. The Principle Of Cyclic Process Of Training:

In accordance with the time available for training cycles of shorter and longer durations are to be formulated in a way that high performance results. The three popular cycles of training are:

- a) Macro cycle (3-12 months)
- b) Meso cycle (3-6 weeks)
- c) Micro cycle (3-10 days)

The training cycles forms the backbone of the training process. The smallest cycle that is the micro cycle which is formulated in days consists of a specific number of training units depending on the training age and state of the trainee or sportsperson. 3-4 micro cycles combine to form a meso cycle; similarly 3 or more meso cycles combined together forms a macro cycle. The cycles are planned keeping in mind the competition date as well (as a part of periodisation) so as to achieve top performance at the time of the competition. It should always be kept in mind that in each macro cycle, the last meso cycle; in the meso cycle the last micro cycle; and in micro cycle the last session of training is formulated to guarantee recovery and relaxation.

10. The Principle of Ensuring Results:

The sports training programs shall be so formulated that the attainment of training tasks is ensured. After spending time and effort if the sportsperson fails to attain performance, he might start losing contact with the training program and also lose confidence in the coach.

Characteristics

The dictionary meaning of characteristic is 'pertaining to, constituting, or indicating the character or peculiar quality of a person, thing or specific subject' they are typical and distinctive to the subject under consideration. The characteristics of sports training also describe its nature, its distinguishing features or qualities. Following are the characteristics of sports training:

1. Performance Oriented:

An individual or a sportsperson usually gets involved in a specific training program so as to achieve a certain degree of excellence in the particular sport. Sports training aim at achieving high performance in a sports competition. It is a long term process which is performance and competition oriented. It is not just a play or a recreational activity, but a serious activity.

This particular characteristic that it is performance oriented is mainly responsible to attract sportspersons towards trained coaches and opt for sports training. No individual would want his or her hard work, time and resources to get wasted without availing the results. All the hard work gets paid off when there is a significant improvement in the performance of the sportsperson from that at the entry level.

2. Individual Process:

It is a well known and established fact that no two individuals are alike and their abilities and capacities vary. A load may be showing expected results in case of one sportsperson but that may not be the case in case of another sportsperson as his load taking capacity may be either higher or lower than the former. They may differ in many factors some of them being the chronological age, training age, state of health, load taking capacity, pace of recovery, psychological matters and various other factors which influence training. If the individual is given loads less than his capacity, then it may avail no results whereas, on the other hand if the loads are beyond the capacity of the individual the results may be drastic; it may lead to injuries and even loss of interest on the part of the sportsperson. In view of the above, the training load is to be prescribed for each person individually. The principle is that the players of a team may train collectively as far as possible but undertake individually, calculated loads, as necessary.

3. A Sports Life Corresponding To The Demands of Competitive Sport:

The training program of sportsperson shall be so designed that they learn to face the high demands of the competition. This is made possible particularly by adhering to the principle of use of critical loads as mentioned in the principles of sports training. The sportsperson has to develop such characteristics that they adapt themselves quickly to competitive situations and are able to put up their best performance.

4. Planned and Systematic:

In order to achieve high performance sports training is done in a planned and systematic manner. A sport training program is always planned in the form of shorter and longer training cycles, namely micro cycle, meso cycle and macro cycle. Systematically planned training program only can help a sportsperson to achieve high performance. Unsystematic, confusing and haphazardly planned training schedules will be detrimental to the attainment of high standard of sports achievement.

5. Scientific:

Sports training programs are scientific in nature and they incorporate findings of the latest researches and reject the training methods and means that get outdated. Sports training programs should mirror the latest trends and developments in the field of sports training so as to ensure the attainment of optimum performance in sports. If a coach does not keep himself updated with the latest tools and technologies that have come up and stick to the old system of training then the trainees are deemed to suffer and underperform at the major events. The outcome of such training may be far below par in comparison to the trainees who are trained under an up-to-date coach who changes with the changing trends.

6. Coach as a Leader:

Sports training is always assessed, planned, organized and implemented by a coach/physical education teacher/some other responsible person. He bears the overall responsibility for the effectiveness and success of training. He takes the help of the sports scientists in order to improve the performance of the sportsperson. He is involved in the planning, implementation and assessment of the training. The coach is also responsible to guide and help the sportsperson in achieving high performance.

7. Controlled Daily Routine:

A Sports training program is very scientific, systematic and pedagogic process which is not just meant for fun and recreation. It is hard and exacting and requires a high level of dedication on the part of all those involved in the complex process. In order to do training regularly with best effects, the sportsperson too has to adjust his daily activities. He has a very tight schedule as the high demands of competition in today's scenario demands very high intensity and volume of load, that puts a lot of physical, physiological as well as psychological stress on the sportsperson. All these leaves the sportsperson completely exhausted and in order to

recover the sportsperson has to maintain a very healthy lifestyle as well as give the body adequate time to recover from the wear and tear that it has gone through during the whole training process. Adequate rest, sleep and nutrition leaves very little time for the trainee to get involved in merrymaking and social engagements and thus compels them to have a controlled daily routine in order to ensure the desired outcome of the training program. As a result, the sportspersons control their day to day routine in such a manner that they are able to train themselves once or twice a day with high effect.

8. Sports Training Calls For High Degree of Self Reliance on the Part of the Sportsperson:

All the hard work would become worthless if this characteristic is not fulfilled in the training process of the sportsperson. Sports training programs are designed in such a way that each sportsperson develops self confidence and starts relying on oneself rather than on spoon feeding by the coach. It is very important to monitor the physiological and psychological aspects of development as well, at times even the best of training is not good enough to bring out the best performance of an individual. It is at this phase and also during the entire training program that the sports scientists have vital responsibility in order to monitor the psychological conditions like stress, anxiety, fear, motivation, family, etc. as well as the physiological aspects that may have an effect in the performance of the sportsperson and take immediate steps to turn off the stressors and nullify its effect on the performance as well as boost the self confidence of the trainee. The coach acts as a leader who guides and assists the sportsperson in achieving high performance.

9. Educational Process:

Sports training is an educational and pedagogical process, it not only focuses on the development of the sportsperson but also the psychological, intellectual, vocational and social development. Through participation in systematically planned sports training programs, the sportsperson ultimately develops an all-round personality and thus becomes capable of attaining high performance. It also makes the sportsperson or trainee to develop a sense of civic responsibility as well by inculcating the feelings of cooperation between the team mates and through interaction with sportspersons of varied cultures and values.

Aims and Tasks of Sports Training

Aim of any program or individual or organization refers to a purpose or intention; a desired outcome. When we talk about shooting there is a specific target on which the shooter intends to shoot. An individual, organization or program without any aim is a headless beast that exists but is a liability for itself as well as for those around him or associated to him. Each and every person or organization sets an aim that it intends to achieve at a specific or some point of time.

The aim of sports training is to prepare a sportsperson physically, physiologically and psychologically for a possible highest sports performance at the time of the main competition, in a specific sport.

In order to achieve the ultimate goal or aim certain steps or tasks need to be formulated. These tasks or objectives act as a road map to the ultimate aim. To ensure that the aim of sports training is fulfilled, the following five tasks need to be achieved:

1. Development of sports personality
2. Physical preparation
3. Technical preparation
4. Tactical preparation
5. Psychological/Mental preparation.

The tasks have been explained as under:

1. Development of Sports Personality:

The term personality refers to 'a mask' which the characters used to wear according to the characters they portrayed in a play. Each individual's personality is unique to him and differs from that of the other. The personality of a sportsperson differs from a common human being. The personality of a sportsperson develops through high demands of training and competition on physical, social, physiological and intellectual aspects which are worthwhile to develop the required characteristics in him. In other words, if performance improvement is to be guaranteed, the total personality of a sportsperson has to be improved.

2. Physical Preparation:

The complete physical preparation of a sportsperson is ensured as a result of the development of essential motor qualities namely strength, endurance, speed, flexibility and coordinative abilities. In order to achieve the aim of sports training the task of the development of motor qualities is a pre-requisite. They have to be developed to the optimum level by means of various general, specific and competitive exercise schedules which are specific to a sport.

3. Technical Preparation:

On completion of physical preparation the focus shifts to technical preparation which bears direct relation to sports performance. To attain optimum performance the sportsperson has to be technically sound i.e. he should be able to execute the sports motor actions/movements effectively even during the pressure of competition. More importantly mastery over the technical skills leads to economy of movements.

4. Tactical Preparation:

Tactics means the intelligent and creative use of technical knowledge within the boundaries of the rules and regulations of the competition to achieve high performance. Hence this task starts after the sportsperson has gained technical knowledge. The role of tactics is more dominant in team games than in individual sports. The quantum of technical training increases as the performance of the sportsperson improves.

5. Psychological/Mental Preparation

It is a wrong belief that optimum performance can be achieved by mere perfection of the physical, technical and tactical aspects of the sport. Another important aspect that needs to be considered is the psychological preparation of the sportsperson which has a dominant effect on the performance. Optimum sports performance is psycho-motor in nature and hence for its improvement through training as well as to achieve it in a competition the sports person depends on both his external and internal potentialities. The psychological elements namely motivation, stress, anxiety, peer pressure and many other such factors needs to be considered and controlled so as to achieve the aim of sports training.

Conclusion

Sports training are a specialized process of the all-round physical development of a sportsperson by means of various means and methods, scientifically and systematically designed by the coach in light of the aim and tasks of training. All the sessions are designed keeping in mind the guiding principles discussed earlier so as to ensure results and fulfill all the characteristics. In other words, sports training are an educational and pedagogical process. A clear understanding of all the aspects of sports training guarantees the success of the sportsperson to achieve high performance. Thus it is really important to have a clear understanding of the in and out of sports training.